



# VL501

## LTE Vehicle Terminal

The VL501 is a plug-and-play tracker with GNSS, LTE, and Bluetooth connectivity. With a cigar lighter power connector, it is easy to install on virtually any vehicle. It is an ideal choice for individuals as well as fleet managers who would like to track their vehicles in applications such as courier delivery, car rental and leasing, insurance telematics (UBI), and much more. The considerate design of the USB-A and Type-C ports make the charge of other devices like cellphone much more convenient; while the OTA makes firmware upgrade easier.



### Plug and Play

Easy to install via the cigarette lighter power connector.



### Driving Behavior Analysis (Basic)

Receive alerts when any of 4 kinds of dangerous driving behavior is detected.



### Remote Listen-in (NA only)

Inconspicuous mic allows for remote audio monitoring of the environment around the device.



### Fast Charging Design

Fast charge other devices via the USB or Type-C port using advanced technologies or protocols.



### Panic Button

Contact dispatch or emergency support with a discreet, in-cabin SOS button.



### Multiple Alerts

Alert drivers on the very first position fix, speeding, driver fatigue, or entering or leaving a geofence via a buzzer.

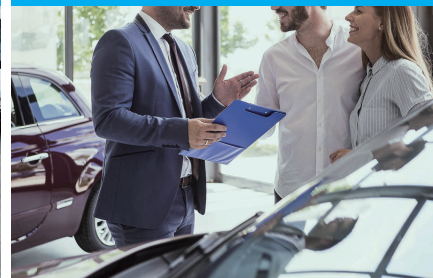
#### Usage-based Insurance



#### Fleet Management



#### Auto Dealers



## GNSS

Positioning system	GPS, GLONASS, BDS, AGPS, QZSS
Positioning accuracy	< 2,5m CEP (open sky)
Tracking sensitivity	-165 dBm
Acquisition sensitivity	-148 dBm (cold) / -157 dBm (hot)
TTF (open sky)	Avg. hot start ≤ 1sec Avg. cold start ≤ 32sec

## Cellular

Communication network	LTE
Frequency	<b>VL501-N:</b> LTE-FDD (Cat 1): B2/B4/B5/B12/B13 <b>VL501-J:</b> LTE-FDD (Cat M1/NB2): B1/B3/B8/B18/B19/B26

## Power

Input voltage	9-36VDC
Back-up battery	50 mAh
Power consumption (Uncharged state)	Sleep: typ. ≤ 12V/15mA GPS tracking and cell enabled: typ. ≤ 12V/120mA

## Interface

Connector	Cigarette lighter socket
USB	1 x USB-A for quick charge 1 x Type-C for quick charge, upgrade, and debugging
LED indication	1 x Power indicator (red) 1 x SOS alert (blue)
Memory	64Mb

## Physical specification

Dimensions	70,0 x 52,0 x 82,5 mm
Weight	60g

## Operating environment

Operating temperature	-20 C to +70 C
Operating humidity	5%~95%, non-condensing

## Feature

Sensors	Accelerometer and gyroscope
Microphone	Built-in
Firmware update	OTA
Scenarios	Collision alert, low external power alert, vibrating alert, unplug alert, installation alert, overspeeding alert, fatigue driving alert, geo-fence alert